

## Extremophiles –Life at the Edge

1. What is an enzyme? How are enzymes important to living things?
2. Describe two factors that can cause the denaturation of proteins. What effect does denaturation have on the function of an enzyme?
3. Extremozymes containing the amino acid cysteine might be less likely to denature in extreme conditions. What is the explanation for their higher stability?
4. How are some extremophiles able to thrive in very salty environments?
5. Suggest two reasons for the scientific interest in extremophile research.